

II Amendments to the Claims

Please amend claims 21–37 as shown below in a complete listing of all of the claims of the application identifying the status of each claim:

Claims 1–20. (canceled)

Claim 21. (currently amended) A method for grafting an unsaturated monomer onto a polysaccharide comprising the steps of: (1) forming a mixture comprised of an unsaturated monomer and a water soluble or water dispersible polysaccharide; (2) irradiating the mixture with an amount of electron beam radiation sufficient to form an unsaturated monomer-water soluble or water dispersible polysaccharide graft copolymer ~~which is depolymerized relative to the ungrafted polysaccharide~~ and depolymerize the graft copolymer to a molecular weight lower than the molecular weight of the ungrafted polysaccharide.

Claim 22. (currently amended) The method of claim 4 21, wherein the unsaturated monomer is a vinyl monomer having a functional group.

Claim 23. (currently amended) The method of claim 4 21, wherein the polysaccharide is selected from the group consisting of guar, cationic guar, nonionic guar, locust bean gum, tara gum, amylose, amylopectin, xanthan and xanthan gum.

Claim 24. (currently amended) The method of claim 2 22, wherein the polysaccharide is guar.

Claim 25. (currently amended) The method of claim 2 22, wherein the polysaccharide is a ~~modified~~ cellulose containing at least one functional group.

Claim 26. (currently amended) The method of claim 2 22, wherein the functional group is a carboxylate, a phosphonate, or a sulfonate group.

Claim 27. (currently amended) The method of claim 2 22, wherein the vinyl monomer is methacrylamidopropyltrimethylammonium chloride.

Claim 28. (currently amended) The method of claim 2 22, wherein the functional group is a ~~quaternary~~ quaternary ammonium group.

PATENT

Serial No. 10/607,079; Filing Date: June 25, 2003

Examiner: Everett White; Art Unit: 1623

Attorney Docket No. Rhodia.02036 US

Claim 29. (currently amended) A polysaccharide grafted with an unsaturated monomer, said grafted polysaccharide being dispersible in water and having a molecular weight lower than the molecular weight of the ungrafted polysaccharide.

Claim 30. (currently amended) The grafted polysaccharide of claim 9 29, wherein the polysaccharide is selected from the group consisting of ~~modified~~ cellulose containing at least one functional group, galactomannan and xanthan.

Claim 31. (currently amended) The grafted polysaccharide of claim ~~40~~ 30, wherein the polysaccharide is a ~~modified~~ cellulose containing at least one functional group.

Claim 32. (currently amended) The grafted polysaccharide of claim 9 29, wherein the unsaturated monomer is a vinyl monomer.

Claim 33. (currently amended) The grafted polysaccharide of claim ~~42~~ 32, wherein the vinyl monomer is selected from a carboxylated vinyl monomer, a sulfonated vinyl monomer, a phosphonated vinyl monomer and a ~~quaternary~~ quaternary ammonium vinyl monomer.

Claim 34. (currently amended) The grafted polysaccharide of claim ~~43~~ 33, wherein the vinyl monomer contains a ~~quaternary~~ quaternary ammonium group.

Claim 35. (currently amended) The grafted polysaccharide of claim 9 29, wherein the polysaccharide is selected from the group consisting of guar, cationic guar, nonionic guar, locust bean gum, tara gum, xanthan gum and amylose.

Claim 36. (currently amended) The grafted polysaccharide of claim 9 29, wherein the polysaccharide is selected from the group consisting of guar and hydroxypropyl guar.

Claim 37. (currently amended) A cosmetic composition comprising the grafted polysaccharide of claim 9 29.